RAW SEQUENCE LISTING   DATE: 01/09/2002
PATENT APPLICATION: US/09/696,664A   TIME: 14:47:55

Input Set : D:\pa_00316.txt
Output Set: N:\CRF3\01082002\I696664A.raw   p.5

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 1 <110> APPLICANT: Abad, Mark S.
 2         Andersen, Scott E.
 3         Dubois, Patrice
 4         Mahadeo, Debbie A.
 5         Masucci, James D.
 7 <120> TITLE OF INVENTION: Nucleic Acid Molecules And Other Molecules Associated With
 8         Plants
10 <130> FILE REFERENCE: 38-21(51721)B
12 <140> CURRENT APPLICATION NUMBER: US 09/696,664A
13 <141> CURRENT FILING DATE: 2000-10-25
15 <150> PRIOR APPLICATION NUMBER: US 60/161,619
17 <151> PRIOR FILING DATE: 1999-10-26
19 <160> NUMBER OF SEQ ID NOS: 17472
21 <210> SEQ ID NO: 1
22 <211> LENGTH: 416
23 <212> TYPE: DNA
24 <213> ORGANISM: Zea mays
26 <220> FEATURE:
27 <223> OTHER INFORMATION: Clone ID: LIB3179-001-P1-K1-A11
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35 taggatatgc tctaagtctt cccatacttt cctataatga ctgcaacgat tttctccatt  180
37 ttgcgaattc ctatttttatt tgaagtatat tactatcata tacattatct aaatcgatcc  240
39 actttaaata aaatagaaaa aatcgaaaga aaaaaaaaaa gaaagagtaa ataataaaac  300
41 aggatattct gtttcataat tctgaaatag agttcttttt tttagtatta ctcctcatta  360
43 ggatgtatat attaatcatc ctattttaat atatattaat catcctattt taatta       416
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47 <211> LENGTH: 157
48 <212> TYPE: DNA
49 <213> ORGANISM: Zea mays
51 <220> FEATURE:
52 <223> OTHER INFORMATION: Clone ID: LIB3179-001-P1-K1-A12
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58 agagtatggg agaaacctta atctaaagaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa  120
60 aaaaaaaaaa aaaaaaaaaa ataaaaataa attataa                           157
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64 <211> LENGTH: 420
65 <212> TYPE: DNA
66 <213> ORGANISM: Zea mays
68 <220> FEATURE:
69 <223> OTHER INFORMATION: Clone ID: LIB3179-001-P1-K1-A2
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73 gcgcgttgtg agaattctta attcatgagt tgtagggagg gacttatgtc accacaaaca   60
75 gaaactaaag caagtgttgg atttaaagct ggtgttaagg attataaatt gacttactac  120
77 accccggagt acgaaaccaa ggatactgat atcttggcag cattccgagt aactcctcag  180
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Input Set : D:\pa_00316.txt
Output Set: N:\CRF3\01082002\I696664A.raw

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81  tggacaactg tttggactga tggacttacc agtcttgatc gttacaaagg acgatgctat   300
83  cacatcgagc ccgttcctgg ggacccagat caatatatct gttatgtagc ttatccatta   360
85  gacctatttg aagagggttc ttgtactaac atgtttactt tcattgtggg taacgtattt   420
88  <210> SEQ ID NO: 4
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90  <212> TYPE: DNA
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93  <220> FEATURE:
94  <223> OTHER INFORMATION: Clone ID: LIB3179-001-P1-K1-A3
96  <400> SEQUENCE: 4
98  caacccttcc ggtttgtgtt taaagtttgc atttttttg cagagctggc ggatacggag    60
100 tcgtaggtgg gcttggtacg ttgatgatca cagacaggac acgatcggat cggggtagat   120
102 aaagagggat aaaagtggag gacggctgta cagacacgta cggagatgcc actgctgtga   180
104 tgagacacgc tatttgcagg gcgaaccctg ttactatcat gtgcttcttg tcaggtacca   240
106 tatgctactc gatggt                                                    256
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111 <212> TYPE: DNA
112 <213> ORGANISM: Zea mays
114 <220> FEATURE:
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121 aagaacggcc gcctcgccat gttctccatg ttcgggttct tcgtccaggc catcgtcacc   120
123 ggcaagggcc cgctcgagaa cctcgccgac cacctcgccg accccgtcaa caacaacgca   180
125 tgggcctatg ccaccaactt tgtgcccggc aagtgagggg gtggaggcgc caccgcccac   240
127 cggccaccgc tgcggatatc taggtgttcg gatgcacgtg agcgcgcact ggttccagtt   300
129 tgtaccatga tgtaaattac ttaccgtacc agggttcaat cggcaaggaa gaattgttgt   360
131 gttc                                                                 364
134 <210> SEQ ID NO: 6
135 <211> LENGTH: 361
136 <212> TYPE: DNA
137 <213> ORGANISM: Zea mays
139 <220> FEATURE:
140 <223> OTHER INFORMATION: Clone ID: LIB3179-001-P1-K1-A5
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146 aaggtgaaga tactcaaggc ccccaagttt gatctcggga agttgatgga ggttcatggc   120
148 gactacaaag aggacgttgg tgtgaagctt gagaggcctg tcgagggtga tgaggctatg   180
150 caggaggttg ctgctgccga gtagtttatt tgctacttct ttatctagac gaatctggac   240
152 aggaggtccc ttatgacgcg aacttcataa aattgtctgg cgacatgttt tcttctgtcc   300
154 ctgccctaaa ctctaaaccc aaaggttatt cgtaacaagt gttttaagat tatttttgtt   360
156 t                                                                    361
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160 <211> LENGTH: 317
161 <212> TYPE: DNA
162 <213> ORGANISM: Zea mays
164 <220> FEATURE:
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Input Set : D:\pa_00316.txt
Output Set: N:\CRF3\01082002\I696664A.raw

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166 <222> LOCATION: (1)..(317)
167 <223> OTHER INFORMATION: unsure at all n locations
169 <220> FEATURE:
170 <223> OTHER INFORMATION: Clone ID: LIB3179-001-P1-K1-A6
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176 cggctctccg ccgccgctat ggccgctcgc cgcctcctcc ttctcctcgc cgttgtcgcc   120
178 gcgtccctcc tggctgccga cgcgcggccg tgccacggct tcctcgtcgc catcccgtcc   180
180 gatcccaacc ccgacccctag cagaggcgac ggcgccgtca accgccacct cggcgctccc   240
182 cacgtcgcca cggtcatcac cgtcttccgc gtccgccgcc tcggtccaca cgtnccccac   300
184 ggtccaccga accacca                                                  317

187 <210> SEQ ID NO: 8
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189 <212> TYPE: DNA
190 <213> ORGANISM: Zea mays
192 <220> FEATURE:
193 <223> OTHER INFORMATION: Clone ID: LIB3179-001-P1-K1-A8
195 <400> SEQUENCE: 8

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199 gaagacattg gtgacccaag tgtgaggttc atcacctaca accacaaggt gaacggcaaa   120
201 cgggtggtgc gcttcaagtc gaaccatctc ggcaagttct ggaggcggag ccccaactgg   180
203 atctgggccg acaccgacga caccagcacc aagaactccg acaccctgtt cgaggtcatc   240
205 aagatcgacg aggacggtgt gtacgcgctc cggaacctcg gcaacaacca cttctgccac   300
207 aggctgacct acgacggcaa ggagagctgc ctgaatgcca ca                       342

210 <210> SEQ ID NO: 9
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215 <220> FEATURE:
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224 agctgcttga tagagttgat agtttggtca aggagccaga tctgaaggac atacgcatca   180
226 cctttgagga gtttaaggca tttgctgatt tgcgacgaag attggagcca ctgtcgatgg   240
228 ctatctttgc ttacggtaaa ttgaatgggt tattgacgaa agaggatcta aaacgtgcag   300
230 cgcaacatgt ttgcggggtc gacttaacag atagagtagt agacatcatt ttccatgtgt   360
232 tcgacacaaa tcaagatggg aacttgag                                       388

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237 <212> TYPE: DNA
238 <213> ORGANISM: Zea mays
240 <220> FEATURE:
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243 <400> SEQUENCE: 10

245 cggttggtgt acgagggcgc caatgtggga gatgagttcg tggagacgga gtactacaag    60
247 gacctcggcg gcgtcggcga gcagcaccac acgaccggaa cgggcttcat caagatggac   120
249 aaagctaaag gcgcccccct t caaactgtct gaagatccca atgcagagga gcgacatgct   180
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RAW SEQUENCE LISTING
PATENT APPLICATION: **US/09/696,664A**

DATE: 01/09/2002
TIME: 14:47:55

Input Set : **D:\pa_00316.txt**
Output Set: **N:\CRF3\01082002\I696664A.raw**

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255 ttcagacgag tgctttccac cattagaata agaaaccaca ctggttgtcc accatatctt  360
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262 <212> TYPE: DNA
263 <213> ORGANISM: Zea mays
265 <220> FEATURE:
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270 gctgcgttga ctcgggtttg gtcgacaata ttgggttctg tgcgggtaat gccggttgca   60
272 tcattatgga agacagatgt ggaggccgtt ggccggtgcc tgctcgtgat gcgctttccc  120
274 tggatgtcat ttgattaatt ataagcaagt acgtgaagaa acgagggcca gacgactgtc  180
276 gtccagcgat tggttatttg tgaacttgtc gtttgtcttc ttatttcaac tttccaataa  240
278 gccccttcgt gaagtgtcat ccgcttcaaa gtctgtcgac tgttacgtat acaaatctat  300
280 atatcaaatt aagacggcgc ccgtaccgtg tgtatt                            336
283 <210> SEQ ID NO: 12
284 <211> LENGTH: 373
285 <212> TYPE: DNA
286 <213> ORGANISM: Zea mays
288 <220> FEATURE:
289 <223> OTHER INFORMATION: Clone ID: LIB3179-001-P1-K1-B12
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297 ccaaggagaa catggagtct ctgatatcga tcggccagga gctgctcaac aagccagtgg  180
299 cgagagtgaa catcgacaca gggctgtacg agtcctgcga gggtgagggc acaaatgcac  240
301 agtcgctagc tgacttcgcc aagcagctct ctgacgagcg caagctacgc aagagcaatc  300
303 tcaacttcaa ctaataaata ccttttggtc acagcatgtg ctcttttttg tggatcaccg  360
305 gttcttattt tta                                                    373
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309 <211> LENGTH: 145
310 <212> TYPE: DNA
311 <213> ORGANISM: Zea mays
313 <220> FEATURE:
314 <223> OTHER INFORMATION: Clone ID: LIB3179-001-P1-K1-B2
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322 tagctaaagg cgcccgtttt aaact                                       145
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326 <211> LENGTH: 409
327 <212> TYPE: DNA
328 <213> ORGANISM: Zea mays
330 <220> FEATURE:
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341 ccatctcggc aacgccgttc ctgattctga tatgcttctt gtcgggaacc atatgctact   240
343 tcatggtgcg cctccatcct ggcttcgagc actacatctt cttcgtcttg aacctgtacg   300
345 ccagcgttac ggtggtcgag agcttgatga tggcgattgc cagtgtcatt cccaatttcc   360
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353 <213> ORGANISM: Zea mays
355 <220> FEATURE:
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364 cgcgtggagg cgaggcacgt cgactacagc caggtcccca gcgtgcccaa gccgctcatg   180
366 gtggtcgccc ccaccgacgc cggcgtgtac cccgtggccg tcttcctgca cggctgcaac   240
368 acggtcaaca gctggtatga gagcctcctg tcgcacgtcg cgtcccacgg gttcatcgcc   300
370 gtggcgcccc agctctactg cgtgacgctc aacatgaacg acttgaagga catcgacgcc   360
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376 <211> LENGTH: 258
377 <212> TYPE: DNA
378 <213> ORGANISM: Zea mays
380 <220> FEATURE:
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387 ctcaactgcc tctgccccgg caaaaacaac tccaaagacc tataaaactg tctctttacc   120
389 cgcccagctt ctgataatcc gaaatggagc agcatgtatg tatattacca aaaacaagat   180
391 ggaaaaaagc acaaacaccc gctgctccaa tagcacccgt aaataaacca atgcccgcat   240
393 gaacttgact tacaaata                                                 258
396 <210> SEQ ID NO: 17
397 <211> LENGTH: 367
398 <212> TYPE: DNA
399 <213> ORGANISM: Zea mays
401 <220> FEATURE:
402 <223> OTHER INFORMATION: Clone ID: LIB3179-001-P1-K1-B7
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410 agctgcttga tagagttgat agtttggtca aggagccaga tctgaaggac atacgcatca   180
412 cctttgagga gtttaaggca tttgctgatt tgcgacgaag attggagcca ctgtcgatgg   240
414 ctatctttgc ttacggtaaa ttgaatgggt tattgacgaa agaggatcta aaacgtgcag   300
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418 cgacaca                                                             367
421 <210> SEQ ID NO: 18
422 <211> LENGTH: 127
423 <212> TYPE: DNA
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Use of n and/or Xaa has been detected in the Sequence Listing. Review the Sequence Listing to insure a corresponding explanation is presented in the <220> to <223> fields of each sequence using n or Xaa.

VERIFICATION SUMMARY
PATENT APPLICATION: US/09/696,664A

DATE: 01/09/2002
TIME: 14:47:56

Input Set : D:\pa_00316.txt
Output Set: N:\CRF3\01082002\I696664A.raw

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L:660  M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:28
L:662  M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:28
L:672  M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:28
L:757  M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:32
L:1072 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:46
L:1130 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:49
L:1173 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:51
L:1284 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:55
L:1393 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:59
L:1423 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:60
L:1451 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:61
L:1574 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:66
L:1602 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:67
L:1622 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:68
L:1763 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:74
L:1881 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:79
L:1883 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:79
L:1955 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:82
L:1959 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:82
L:2004 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:84
L:2095 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:88
L:2097 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:88
L:2163 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:91
L:2165 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:91
L:2167 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:91
L:2169 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:91
L:2195 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:92
L:2197 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:92
L:2229 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:93
L:2231 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:93
L:2257 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:94
L:2259 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:94
L:2287 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:95
L:2289 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:95
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L:2368 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:98
L:2394 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:99
L:2416 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:100
L:2446 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:101
L:2450 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:101
L:2579 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:107
L:2609 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:108
L:2641 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:109
L:2688 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:111
L:2779 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:115
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L:2841 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:118
L:2995 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:125